

Abstracts Section III

The following abstracts are of papers presented or submitted for presentation but either were not given or complete manuscripts not prepared. They have not received the critical review to which full length papers have been subjected.

—Editor.

Puccinia oxalidis, AN HELP IN THE CONTROL OF OXALIS—G. Durrieu, Universite P. Sabatier, Toulouse, France. Accidentally introduced in southern France, the rust *Puccinia oxalidis* produces destruction on foliage of *Oxalis latifolia* (introduced garden weed). But its effect as a biological control agent is weak, because foliage of *Oxalis* disappears from December to April, and the over wintering of the rust is assumed by only few urediospores. So, the spreading of the fungus is very slow at the beginning of each summer. To obtain an effective control result it is necessary to grow the rust in greenhouses during winter and reintroduce a great amount of inoculum in the open at the sprouting of new leaves.

OBLIGATE PATHOGENS OF THE MILKWEED VINE, MORRENIA ODORATA, AS BIOLOGICAL CONTROL AGENTS—R. Charudattan, H. A. Cordo, A. Silveira-Guido and F. W. Zettler, University of Florida, Gainesville, FL, U.S.A.; USDA-ARS, Biological Control of Weeds Research Laboratory, Hurlingham, Argentina and Av. Luis de Herrera 4423, Montevideo, Uruguay. A recently discovered virus and two previously identified rusts are being tested as potential biocontrol agents for the milkweed vine [*Morrenia odorata* (Hook & Arn.) Lindley] in Florida. The pathogens were col-

lected from localities in Argentina and Uruguay. The virus was collected from *Araujia angustifolia*, a relative of *M. odorata*. It is easily transmissible to *M. odorata* by manual inoculation or by the aphid, *Myzus persicae*. Systemic mosaic symptoms and leaf distortions are induced by the virus on *M. odorata*. The virus was classified as a member of the Potato Virus Y group on the basis of particle length, inclusion morphology, and the stylet-borne mode of transmission by the sphid. Preliminary host range and serological studies have suggested, respectively, a narrow host range for the virus and its distinction from 10 known viruses of the PVY group. *Aecidium asclepiadinum* causes severe distortion, witchesbrooming and stunting of infected branches of *M. odorata*. Aecia are systemic on laminae, petioles and stems. Spermagonia (pycnia) which have been discovered recently in this rust, are also systemic and are usually formed prior to aecia. *Puccinia araujae*, known only in telial state, forms pustules on lower leaf surfaces, petioles and stems of *M. odorata*. Tissues surrounding older telia usually turn necrotic. Extensive zonate foliar necrosis and stem dieback, both spermagonia and aecia of *A. asclepiadinum*, as well as telia of *P. araujae* have been observed to occur on individual plants and leaves of *M. odorata*, suggesting that the two rusts are stages of a single demicyclic rust. Further proof of this point from host inoculation tests is awaited. The significance of this virus and the rusts as biocontrol agents for the milkweed vine is evident from their host specificity, the severity of host damage and their capacity for self-dissemination. Tests confined to quarantine conditions are underway to evaluate these pathogens as biocontrol for the milkweed vine in Florida.